

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA**

SAVVY DOG SYSTEMS, LLC, and POM OF PENNSYLVANIA, LLC,	:	Civil No. 3:19-CV-01470
	:	
	:	
Plaintiffs,	:	
	:	
v.	:	
	:	
PENNSYLVANIA COIN, LLC, and	:	
PA COIN HOLDINGS, LLC,	:	
	:	
Defendants.	:	Judge Jennifer P. Wilson

MEMORANDUM

Before the court are the parties’ proposed constructions for the disputed claim terms of U.S. Patent No. 7,736,223 (“223 Patent). (Docs. 71, 72, 74, 85, 87.)

FACTUAL BACKGROUND AND PROCEDURAL HISTORY¹

Plaintiffs Savvy Dog Systems, LLC (“Savvy Dog”) and POM of Pennsylvania, LLC (“POM”) (collectively, “Plaintiffs”) initiated this action via complaint on August 23, 2019, against Defendants Pennsylvania Coin, LLC and PA Coin Holdings, LLC (collectively, “Defendants”). Defendants filed a motion to dismiss, prompting Plaintiffs to file an amended complaint on November 1, 2019. (Docs. 21, 25.) The single count in the amended complaint sets forth a

¹ Because the court is writing for the benefit of the parties and the court, limited factual background and procedural history are detailed in this memorandum.

claim for patent infringement under 35 U.S.C. § 271 of Savvy Dog’s Patent Number: US 7,736,233 (“‘223 Patent”). (Doc. 25.)

The technology at issue in this patent infringement lawsuit relates to an “electronic gaming method and system with a game preview display.” (Doc. 71–3, p. 2.)² This technology transforms games of chance into games of skill, which then allows skill-based amusement machines in jurisdictions where the use of gambling devices, i.e. games of chance, are largely outlawed. (*See id.* at 12.) Plaintiffs allege infringement of two independent claims within the ‘223 Patent, claim 44 and claim 51, with additional dependent claims adding elements to the independent claims. (*See* Doc. 25.)

On November 15, 2019, Defendants filed a motion to dismiss Plaintiffs’ amended complaint along with a supporting brief arguing that the ‘223 Patent claims patent-ineligible subject matter pursuant to 35 U.S.C. § 101 and that the amended complaint failed to state a plausible claim for patent infringement. (Docs. 31–32.) Following briefing and oral argument, the court denied the motion to dismiss finding that although the claim at issue is an abstract idea, Plaintiffs adequately alleged an inventive concept sufficient to survive a motion to dismiss. (Docs. 37–39, 49, 56, 57, 58–59, 61–62.) Thereafter, Defendants timely answered Plaintiffs’ amended complaint. (Doc. 63.)

² For ease of reference, the court utilizes the page numbers from the CM/ECF header.

On June 25, 2020, Defendants filed a motion to stay this action pending final resolution of non-party Banilla Games, Inc.’s Covered Business Method Review (“CBM”) proceeding before the United States Patent and Trademark Office, Patent and Trial Appeal Board (“PTAB”). (Doc. 68.) Once ripe, the court ordered that the motion would be held in abeyance until the PTAB decided whether to institute review of the CBM petition. (Docs. 69, 70, 77, 80.) The parties, as requested in the court’s prior order, notified the court on November 24, 2020, that PTAB denied Banilla Games, Inc.’s petition for institution of CBM review. (Doc. 106.) Thus, the court denied Defendants’ motion to stay this action on December 8, 2020. (Doc. 109.)

While awaiting a PTAB decision, the court moved forward with the schedule in this case, which included the filing of a joint claim construction statement, technology tutorials, and opening and responsive claim construction briefs by the parties. (Docs. 71, 72, 74, 86, 87, 93.) The court held a claim construction hearing on September 15, 2020, and permitted letter briefs following that hearing on specific issues not previously addressed in the claim constructing briefing. (Docs. 98, 100–102.) Thus, the construction of the claims at issue in the ‘223 Patent is now ripe for review.

STANDARD OF REVIEW

Claim construction is a matter of law to be determined by the court.

Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). As the case moves forward, the court’s ruling becomes the basis for jury instructions at a trial. *AFG Indus., Inc. v. Cardinal IG Co.*, 239 F.3d 1239, 1247 (Fed. Cir. 2001).

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Walter Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Claim terms “are generally given their ordinary and customary meaning.” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1313. Determining how a person of ordinary skill in the art (“POSITA”) “understands a claim term provides an objective baseline from which to begin claim interpretation.” *Id.*

The ordinary meaning of claim terms as understood by a POSITA may be readily apparent to a lay person in some cases. *Id.* at 1314. However, in many cases, “determining the ordinary and customary meaning of the claim requires

examination of terms that have a particular meaning in a field of art.” *Id.* The court must look to “those sources available to the public that show what a [POSITA] would have understood disputed claim language to mean.” *Id.* This is primarily done by reviewing intrinsic evidence, which consists of the claim language, the claim specification, and the prosecution history. *Id.* at 1312–17; *see also Arlington Indus. Inc. v. Bridgeport Fittings, Inc.*, No. 3:01-cv-0485, 2008 WL 542966, at *1 (M.D. Pa. Feb. 25 2008). “[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Phillips*, 415 F.2d at 1314 (citing *Vitronics*, 90 F.3d at 1582). However, the claims do not “stand alone,” but are part of “a fully integrated written instrument,” which consists “principally of a specification that concludes with the claims.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). The specification “is always highly relevant to the claim construction analysis” and is generally dispositive as “the single best guide to the meaning of a disputed term.” *Id.* (quoting *Vitronics*, 90 F.3d at 1582). Further, the inventor’s lexicography will govern when the specification reveals “a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess.” *Id.* at 1316.

In addition to the claim terms and specification, the prosecution history of the patent at issue “provides evidence of how the [Patent and Trademark Office] and the inventor understood the patent.” *Id.* at 1317. However, the prosecution

history may lack the same clarity as the specification because it “represents an ongoing negotiation” between the Patent and Trademark office and the patent applicant. *Id.* “Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

The court may also consider extrinsic evidence, such as dictionaries, treatises, and expert testimony, but such evidence “is less significant than the intrinsic record in determining ‘the legally operative meaning of claim language’” and “is unlikely to result in a reliable interpretation of patent scope unless considered in the context of the intrinsic evidence.” *Phillips*, 415 F.3d at 1317–19 (citations omitted).

DISCUSSION

At the outset, the court notes that the parties generally agree that the definition of a POSITA in this case is a person, in 2006, who had a bachelor’s degree in engineering or computer science, or an equivalent thereof, and at least two years of development experience in the electronic gaming industry.

Turning to the constructions, the parties agree upon two constructions in this case. First, the parties agree that the term “prior to displaying” should be construed as “before making visible on the touch screen display.” (Doc. 71-1, p.

1.) And second, the parties agree that the term “computer readable code” should be construed as “code in a form that can be executed by the computer.” (*Id.*)

Because the parties agree to these constructions, the court will adopt the proposed construction of both terms.

The parties submitted competing constructions for seven terms in the ‘223 Patent. (Doc. 71-2.) During briefing and argument, the parties narrowed their disagreements regarding some of these terms. The court will address each term in the order in which they were argued at the September 15, 2020 claim construction hearing.

1. “Winning combination”

The term “winning combination” appears in 22 of the 75 claims in the ‘223 Patent. (*See* Doc. 71-2, pp. 2–3.) Initially, the parties set forth the following proposed constructions for the term “winning combination”:

Plaintiffs: “array of symbols yielding a successful outcome or corresponding to a prize.”³ (Doc. 71-2, p. 2.)

Defendants: “array of game symbols in the game field yielding a successful outcome.” (*Id.*)

Following the submission of their opening claim construction briefs, Plaintiffs revised their proposed construction to “narrow the scope of disagreement between

³ In all proposed claim constructions within this memorandum, the court underlines the differences between the proposals for clarity.

the parties.” (Doc. 86, p. 12.) At that point, the proposed constructions were as follows:

Plaintiffs: “array of game symbols yielding a successful outcome, including the award of a prize.” (*Id.*)

Defendants: “array of game symbols in the game field yielding a successful outcome.” (Doc. 87, p. 15.)

During the claim construction hearing, Defendants then revised their proposed construction based on Plaintiffs’ revision. (*See* Doc. 98-2, p. 9.) The final proposed constructions for “winning combination” are:

Plaintiffs: “array of game symbols yielding a successful outcome, including the award of a prize.” (Doc. 86, p.12.)

Defendants: “array of game symbols in the game field constituting a win.” (*See* Doc. 98-2, p. 9.)

Although Defendants contend that Plaintiffs’ constructions have “been a moving target,” Plaintiffs’ revision narrowed the disagreement between the parties while Defendants’ revision broadened that disagreement. In determining the proper construction for “winning combination,” the court finds it appropriate to construe the proposed constructions with the least disagreement, i.e. Plaintiffs’ revised construction with Defendants’ original construction. In fact, in their responsive claim construction brief, Defendants argue that because Plaintiffs concede certain language, the court should adopt Defendants’ original proposed construction. (Doc. 87, p. 15.) The court is mindful that the construction

determined by the court will guide jury instructions in this matter, and Defendants' revised construction creates more confusion than clarity. Thus, the court reviews the following proposed constructions in this section:

Plaintiffs: "array of game symbols yielding a successful outcome, including the award of a prize." (Doc. 86, p. 12.)

Defendants: "array of game symbols in the game field yielding a successful outcome." (Doc. 87, p. 15.)

Plaintiffs argue that Defendants' proposed insertion of "in the game field" is unnecessary because a POSITA understands "that a winning combination can exist regardless of whether it is in the game field," and that "the specification rejects the notion that 'winning combination' itself should be construed as symbols 'in the game field.'" (Doc. 86, p. 12.) They further argue that "winning line," "complete line," and "winning combination" are used interchangeably in the specification, and that the "preview embodiment" displays "merely 'a winning or non-winning combination' of the game to be played." (*Id.* at 12–13.) Conversely, Defendants argue that the '223 Patent describes the "winning combination" of symbols in relation to a constructed game field. (Doc. 72, pp. 20–21.)

The court turns to the intrinsic evidence for guidance. The abstract of the '223 Patent describes that the "player's selection of the field element" ultimately "determines and displays each winning combination of symbols." (Doc. 71–3, hereinafter "'223 Patent", Abstract.) Further, in numerous locations, the

specification describes that the “winning combination” is constructed within the “game field,” “field element,” or “field of game symbols.” (‘223 Patent, 2:12–26, 2:40–45, 2:59–64, 2:59–4:25, 4:36–64, 5:15–67, 6:1–32; 9:49–11:13.) The claims themselves similarly use this language. (‘223 Patent, 12:50–13:6; 13:20–31, 13:53–14:13, 14:61–15:21, 16:8–16:26, 16:47–17:2, 17:22–45, 18:1–27, 18:46–19:11, 19:31–21:21.) Thus, reviewing the specification and claim language, the court finds that including “in the game field” is consistent with the intrinsic evidence.

As to “yielding a successful outcome, including the award of a prize,” Plaintiffs argue that this construction eliminates any uncertainty of what constitutes a “successful outcome.” (Doc. 86, p. 13.) They aver that without “including the award of a prize,” jurors would be confused by combinations yielding low-value prizes that “are not winning combinations, because the outcome is not successful enough (*e.g.* where the prize awarded does not exceed the cost to play the game).” (*Id.* (emphasis in original).) Defendants argue that language regarding “a prize” is unnecessary and confusing because “prize” is not defined in the specification, nor does Plaintiffs’ proposal define “prize.” (Doc. 72, pp. 21–22.)

Here, the court agrees with Defendants that inserting “including the award of a prize” muddies the water, rather than defines successful outcome. Plaintiffs do not point to intrinsic evidence within the ‘223 Patent specification or claims that

define “prize.” Furthermore, the court is not convinced that a POSITA or juror would misunderstand or misinterpret a “successful outcome” to mean that a low-value prize is not a successful *enough* of an outcome. Accordingly, following review of the parties’ arguments and intrinsic evidence, the court will construe “winning combination” to mean an “array of game symbols in the game field yielding a successful outcome.”

2. “[Determining/determine/determined] at least one winning combination for each play of the game”

The term “[determining/determine/determined] at least one winning combination for each play of the game” appears in 9 of the 75 claims in the ‘223 Patent. (*See* Doc. 71-2, pp. 3–4.) Initially, the parties set forth the following proposed constructions:

Plaintiffs: “establish[ing] or ascertain[ing] at least one array of symbols yielding a successful outcome or corresponding to a prize for each game to be played.” (*Id.* at 3.)

Defendants: “guaranteeing/guarantee/guaranteed at least one winning combination that may be formed for each game to be played.” (*Id.*)

Again, following the submission of their opening claim construction briefs, Plaintiffs revised their proposed construction so that the competing proposed constructions are as follows:

Plaintiffs: “establish or ascertain at least one winning combination, properly construed, for each game to be played.” (Doc. 86, p. 14.)

Defendants: “guaranteeing/guarantee/guaranteed at least one winning combination that may be formed for each game to be played.” (Doc. 71-2, pp. 3–4.)

Plaintiffs submit that without “clear lexicography from the patentee,” which is missing in this case, “guarantee” should not replace “determine.” (Doc. 86, p. 14.) The ‘223 Patent only uses “guarantee” once in a non-definitional manner and it is inconsistent with the way the ‘223 Patent uses “determine.” (*Id.*) Conversely, construing “determine” as “establish or ascertain” is confirmed by the claims and “stays true” to the usage of “determine” throughout the ‘223 Patent. (*Id.*)

Defendants argue that defining “determine” as “establish[ing] or ascertain[ing]” adds confusion by providing two different dictionary definitions of “determine.” (Doc. 72, p. 24.) Plaintiffs’ proposed construction would also make this term impermissibly broad because “it could be misunderstood to encompass a basic award scheduled,” but the “[m]ere creation of an award schedule does not guarantee that a winning combination will be [sic] actually be achievable by a player in a given game, which is what the claim requires.” (*Id.* at 24–25.) While providing many reasons for the court to disregard Plaintiffs’ proposed construction, Defendants’ support for construing “determine” as “guarantee” is that the specification uses “guarantees” once in describing that each game is winnable. (*Id.* at 23.)

In construing this term, the court recognizes that it must review the entire phrase, rather than a single word, because the “meaning of a phrase is often greater than the sum of the individual words.” *ADE Corp. v. KLA-Tencor Corp.*, 252 F. Supp. 2d 40, 58 (D. Del. 2003). Furthermore, it is unnecessary that “each claim read on every embodiment.” *Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010). However, Defendants would like to court to adopt a construction using a word that appears only once in the ‘223 Patent to replace a word that appears throughout the specification and claims. (*See* ‘223 Patent, 4:20.)

In reviewing the ‘223 Patent claims, the court finds that adopting Defendants’ proposed construction would be narrower than the plain and ordinary meaning of “[determining/determine/determined] at least one winning combination for each play of the game.” *See Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330 (Fed. Cir. 2012). The only time the court should narrow a claim term beyond its plain and ordinary meaning is when: (1) “a patentee sets out a definition and acts as its own lexicographer;” or (2) “the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Id.* (quoting *Thorner v. Sony Comput. Ent. Am. L.L.C.*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). These factors are not present in this case. Moreover, using “guarantee” would be nonsensical in certain contexts of the ‘223 Patent. (*See, e.g.*, ‘223 Patent, Fig 5, Fig 6, Fig 8, 2:21–25, 4:28–31, 4:40–50, 7:6–10, 12:50–13:6.)

Thus, the court finds it appropriate to construe “[determining/determine/determined] at least one winning combination for each play of the game” as “establish or ascertain at least one winning combination, properly construed, for each game to be played.”⁴ This construction “stays true to the claim language and most naturally aligns with the patent’s description of the invention.” *Renishaw PLC v. Marposs Societa’s per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (citing *Young Dental Mfg. Co. v. Q3 Special Prods., Inc.*, 112 F.3d 1137, 1142 (Fed. Cir. 1997)).

3. “Test[ing] the game field prior to displaying the game to the player to ensure that a winning combination more valuable than the determined winning combination is not generated inadvertently in completing the field”

This term appears in 9 of the 75 claims of the ‘223 Patent. (Doc. 71-2, pp. 4–5.) Plaintiffs’ initial proposed construction broke this term into three pieces. However, Plaintiffs revised their proposed construction in their responsive brief so that the competing constructions are as follows:

Plaintiffs: “test[ing] the game field prior to displaying the game to the player to ensure that the anticipated outcome corresponding to the winning combination, properly construed, is not superseded by a better

⁴ Because neither party had addressed this issue, during the claim construction hearing, the court questioned the parties regarding the addition of “properly construed” and “that may be formed” in each party’s respective proposed construction of this term. Neither party put forth argument or evidence that convinces the court to include “that may be formed” in the construction of the term “[determining/determine/determined] at least one winning combination for each play of the game.” As to “properly construed,” the court believes this will be a helpful reminder to the jurors that a term within a term has been construed by the court. Therefore, the court includes “properly construed” within its construction of this term.

outcome, such as a higher prize level, in making the field from the plurality of predetermined game symbols.” (Doc. 86, p. 16.)

Defendants: “test[ing] the previously constructed field prior to displaying the actual game to be played to the player to ensure that a winning combination more valuable than the previously determined winning combination is not generated inadvertently when the player completes a winning combination during play of the game.” (Doc. 71-2, pp. 4–5.)

Plaintiffs argue that using “the game field” is clear, versus “the previously constructed field,” which is surplusage, and not consistent with the intrinsic evidence of the ‘223 Patent. (Doc. 86, pp. 16–17.) Defendants’ proposed construction is limiting because “[f]ield construction and testing can be overlapping processes prior to displaying a game field on the screen.” (Doc. 74, p. 32.) As to “prior to displaying the game to the player” versus “prior to displaying the actual game to be played to the player,” Plaintiffs again argue that “the actual game to be played” language is surplusage and limiting because “‘the game’ being tested may not actually be displayed to the player, depending on the results of testing.” (Doc. 86, p. 17; Doc. 74, p. 32.) Next, Plaintiffs submit that “more valuable than” should be construed similar to its proposed construction for “winning combination” as “having a better outcome, such as a higher prize level.” (Doc. 86, p. 18.) Finally, as to “completing the field,” Plaintiffs argue that Defendants cannot point the court to any lexicography showing that “the patentee intended to limit” this term strictly to “the player complet[ing] a winning

combination during play of the game.” (*Id.* at 19.) Rather, the patent uses “complete field” and “field completely filled” to describe the system-created field. (*Id.*)

Defendants submit that the court should construe the disputed term as a single phrase because that is “consistent with the way the ‘223 Patent uses the phrase and will preserve internal coherence in the patent.” (Doc. 72, p. 27.) Breaking the term down into the disputed portions, Defendants argue that using “the previously constructed field” clarifies that this “testing” step refers to the game field constructed in the previous step. (*Id.* at 28.) Using “displaying the actual game to be played” ensures that a POSITA understands that the game is the one displayed to the player in the “automatically displaying” step. (*Id.*) Defendants further interpret “the determined winning combination” to be consistent with the “determining” step by construing it as the “previously determinized winning combination.” (*Id.* at 29.) Lastly, Defendants argue that their construction for “in completing the field” is consistent with the intrinsic evidence of the patent. (*Id.*)

At the outset, the court notes that although Plaintiffs point out reasons that the court should decline to adopt Defendants’ construction of the “testing limitation” term, they fail to provide sufficient support for their proposed constructions in many instances. Notwithstanding this, the court finds it

appropriate to construe the “testing limitation” as a whole, in a manner consistent with the other constructions in this case, and following the specification and claim language. Doing so, the court holds that the “testing limitation” shall be construed as follows: “test[ing] the game field prior to displaying the actual game to be played to the player to ensure that a winning combination more valuable than the previously determined winning combination, properly construed, is not generated inadvertently when the player completes a winning combination during play of the game.”

4. “Automatically display[ing] an actual game to be played on the touch screen game display to a player prior to initiating activation of game play”

The term “automatically display[ing] an actual game to be played on the touch screen game display to a player prior to initiating activation of game play” appears in 9 of the 75 claims of the ‘223 Patent. (Doc. 71-2, pp. 5–6.) Initially, the parties set forth the following proposed constructions:

Plaintiffs: “programmatically instruct[ing] the terminal display on the touch screen the identification of the next game to the player, including showing the player an otherwise unknown system-generated attribute of the next game before the player commits to play the next game.” (Doc. 71-2, pp. 5–6.)

Defendants: “automatically display[ing] an actual game to be played on the touch screen game display to the player before the player commits to play the displayed game.” (*Id.*)

Plaintiffs again revised their proposed construction in their responsive brief so that the competing proposed constructions are as follows:

Plaintiffs: “automatically display[ing] an actual game to be played, properly construed, on the touch screen game display to the player before the player commits to play the displayed game.” (Doc. 86, p. 21.)

Defendants: “automatically display[ing] an actual game to be played on the touch screen game display to the player before the player commits to play the displayed game.” (Doc. 71-2, p. 5.)

At the claim construction hearing, the parties agreed that they no longer dispute the construction to this term, but rather, only dispute the construction of “an actual game to be played” within the term “automatically display[ing] an actual game to be played on the touch screen game display to the player before the player commits to play the displayed game.” Accordingly, the court construes this claim, with agreement of the parties, as: “automatically display[ing] an actual game to be played, properly construed, on the touch screen game display to the player before the player commits to play the displayed game.”⁵

5. “An actual game to be played”

The term “an actual game to be played” appears within the previously construed term and 9 of the 75 claims of the ‘223 Patent. (Doc. 71-3, pp. 6–7.)

The parties’ initial proposed constructions were as follows:

⁵ For the same reasons detailed in footnote 4, the court includes “properly construed” within this term for clarity to the jurors.

Plaintiffs: “the identification of the next game, including at least an otherwise unknown system-generated attribute of the next game.” (*Id.* at 6.)

Defendants: “the constructed game field of the game to be played.” (*Id.*)

Once again, Plaintiffs revised their proposed construction in their responsive brief so that the competing constructions are now as follows:

Plaintiffs: “the game to be played, including an otherwise unknown system-generated attribute of it.” (Doc. 86, p. 21.)

Defendants: “the constructed game field of the game to be played.” (Doc. 71–3, p. 6.)

Plaintiffs argue that with their revised construction, the only dispute is “whether the term should be limited to the preview embodiment, where the game preview screen is ‘the constructed field of the game to be played.’” (Doc. 86, p. 22.) They aver that inserting “constructed field of” would narrow the broader claim language of an “actual game to be played” improperly. (*Id.*) Whereas, “the unknown system-generated attribute of” the game to be played that a player is shown in advance of the game “could be a completely constructed game field,” but “it is not the only way a game to be played can be previewed to lessen the role of chance and ‘stay[] true’ to the invention.” (*Id.* (emphasis in original).)

Defendants argue that the court is not required to construe a claim to capture every disclosed embodiment of the invention. (Doc. 87, p. 30.) Additionally, the Plaintiffs’ referenced embodiments suggest that an “actual game” displayed to a

player is something different than “the constructed game field to be played.” (*Id.* at 31.) Instead, Defendants aver that all embodiments are consistent with their construction “in that the actual *game* to be played involves display of the constructed *game field*.” (*Id.*) They cite to six embodiments in support of their argument and conclude that none of the embodiments show “an actual game to be played” in anything other than “the constructed game field.” (*Id.* at 31–34.)

At the hearing, Plaintiffs further illuminated the disagreement between the parties’ construction:

The difference between the parties’ constructions is that the Defendants’ construction requires the display of the game to be played to have a fully constructed game field of that game for the user to see. Whereas, we believe that it is adequate that it describe the game and provide the user with at least one key attribute of the upcoming game to be played that does not have to show a fully constructed game field.

(Transcript of Claim Construction Hearing at 76.)⁶

The court is mindful that “an actual game to be played” does not exist in the ‘223 Patent specification, but was introduced for the first time during the prosecution of this patent. Thus, while the court can review the specification for context, it cannot derive the meaning of this term therefrom. However, the prosecution history is helpful to the court because it “informs the meaning of the claim language by demonstrating how the inventor understood the invention and

⁶ While the parties did not request a transcript of the September 15, 2020 claim construction hearing, the court obtained an unofficial copy for reference in drafting this memorandum.

whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317 (citing *Vitronics*, 90 F.3d at 1582–83.) Further, “a patentee’s ‘use of “i.e.” signals an intent to define the word to which it refers.’” *SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1200 (Fed. Cir. 2013) (quoting *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1334 (Fed. Cir. 2009)) (referencing the patent’s specification).

The court finds the use of “i.e.” within the prosecution history to be instructive here. The January 26, 2010 Amendment provides: “This recitation clarifies that the actual game to be played (i.e. the game field constructed in the first recited step) is automatically displayed to the player in order for the player to decide whether to initiate play of the game displayed.” (Doc. 71-4, p. 190.) Although the Federal Circuit found “i.e.” most instructive within the patent’s specification, it is reasonable to apply that to the prosecution history when the applicant is the one using “i.e.” to provide a definition. Accordingly, the court finds that there is intrinsic evidence for construing “actual game to be played” to mean “the constructed game field of the game to be played” and will construe it as such.⁷

⁷ As an aside, the court notes that an additional reason to reject Plaintiffs’ proposed construction is that it provides more confusion than clarity. It is hard to imagine a juror being aided by “actual game to be played” being interpreted as “the game to be played, including an otherwise unknown system-generated attribute of it.”

6. “Game processor”

Defendants contend that “game processor,” which appears in 12 of the 75 claims in the ‘223 Patent, but specifically claim 44, is a “means-plus-function” (“MPF”) term under 35 U.S.C. § 112(f). Thus, the court must first determine if “game processor” is an MPF term before construing it as such or reviewing Plaintiffs’ proposed construction and Defendants’ alternative construction.

Section 112(f) provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The court’s first step is to determine whether section 112(f) applies to the term at issue. MPF treatment applies only to “purely functional limitations that do not provide the structure that performs the recited functions.” *DuPuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F. 3d 1005, 1023 (Fed. Cir. 2006). There is a rebuttable presumption that section 112(f) does not apply when the claim does not use the term “means.” *Williamson v. Citrix Online, LLC*, 792 F. 3d 1339, 1348 (Fed. Cir. 2015). However, this presumption can be overcome “if the challenger demonstrates that the claim term fails to ‘recite[] sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000))

(alterations in original). Prior to *Williamson v. Citrix Online, LLC*, this presumption was characterized as “strong” and very difficult to overcome. *Id.* at 1348–49. *Williamson* reevaluated this “strong” presumption and held that the heightened burden was “unjustified.” *Id.* at 1349. Instead, the court reiterated the standard to be:

[W]hether the words of the claim are understood by person of ordinary skill in the art to have a sufficiently definite meaning as the nature for structure. When a claim term lacks the word “means,” the presumption can be overcome and [§ 112(f)] will apply if the challenger demonstrates that the claim term fails to “recite sufficiently definite structure” or else recites “function without reciting sufficient structure for performing that function.”

Id. (internal citations omitted). Generic terms, characterized as “nonce” words, are tantamount to stating “means” and must be construed as such. *Id.* at 1350.

Defendants argue that the “game processor” cited in the claims performs specific claimed functions without describing the structure for the “game processor.” (Doc. 72, pp. 14–15.) Similarly, the specification’s reference to “game processor” details nondescript and nonstructural components for performing various functions. (*Id.* at 15.) Thus, Defendants argue that “[b]ecause the ‘223 Patent treats ‘game processor’ as a generic placeholder for a nondescript device that simply performs the recited functions, it is a means-plus-function limitation.” (*Id.*) According to Defendants, a POSITA’s understanding of a “game processor” as a conventional CPU or microprocessor would be still be an insufficient

disclosure of structure to avoid MPF treatment. (*Id.*) Rather, disclosure of an algorithm is needed. (*Id.* at 15–16.) Further, Defendants aver that the fact that the ‘223 Patent’s claims do not use the term “means” does not save them from MPF treatment because district courts have found “processor” to be a substitute for “means.”

Plaintiffs argue that there is a presumption that “game processor” is not subject to MPF treatment because it does not use the term “means.” (Doc. 74, p. 13.) Since *Williamson*, Plaintiffs’ submit that courts have recognized that “processor” is more analogous to “circuit” than to “means.” (*Id.* at 13–16.) Applying the case law to claim 44 of the ‘223 Patent, Plaintiffs aver that claim 44 provides “appropriate objective, context and componentry,” as well as an “algorithm imparting structure.” (*Id.* at 17–20.)

Applying *Williamson* and reviewing the case law provided by the parties as applied to claim 44, the court finds that “game processor” provides sufficiently definite structure such that Defendants have not overcome the presumption of a non-“means” term. Specifically, the court finds several cases instructive. In *Realtime Adaptive Streaming LLC v. Adobe System*, the defendant argued that it overcame the presumption because the claims at issue only described “processors” in functional terms. No. CV 18-9344, 2019 U.S. Dist. LEXIS 125180, at *45 (C.D. Cal. July 25, 2019). The court held that the defendant did “not offer any

evidence to show that a person of ordinary skill in the art would not understand the word ‘processor’ itself to connote a class of structures.” *Id.* at 45–46 (citing *Zeroclick, LLC v. Apple, Inc.*, 891 F.3d 1003, 1007–08 (Fed. Cir. 2018)). In *Odyssey Wireless, Inc. v. Apple Inc.*, the court noted that *Williamson* did not identify “processor” as a nonce word. No. 15-CV-1735-H, 2016 WL 3055900, at *11 (S.D. Cal. Mar. 30, 2016). However, other courts since *Williamson* have held that “‘processor’ connotes structure.” *Id.* (quoting *Syncpoint Imaging, LLC v. Nintendo of Am. Inc.*, No. 2015-CV-00247, 2016 WL 55118, at *20 (E.D. Tex. Jan. 5, 2016)). The court continued stating “several district courts post-*Williamson* have concluded that the term ‘processor’ sufficiently connotes a definite structure to a person of ordinary skill in the art, and, therefore, found that § [112(f)] did not apply to a claim or claims that used the term ‘processor.’” *Id.* at *11–12 (citing *Syncpoint Imaging, LLC*, 2016 WL 55118 at *18–21; *Smartflash LLC v. Apple Inc.*, No. 6:13-CV-447, 2015 WL 4208754, at *3 (E.D. Tex. July 7, 2015); *Finjan, Inc., v. Proofpoint, Inc.*, No. 13-CV-05808, 2015 WL 7770208, at *10–11 (N.D. Cal. Dec. 3, 2015); *Nomadix, Inc. v. Hosp. Core Servs. LLC*, No. CV 1408256, 2016 WL 344461, at *5–8 (C.D. Cal. Jan. 27, 2016)).

Here, the court finds that Defendants have not rebutted the presumption for “game processor” within claim 44 to be construed as a MPF term. Thus, the court

turns to Plaintiffs’ proposed construction and Defendants’ alternative constructions as follows:

Plaintiffs: “a CPU or microprocessor with input/output circuitry that executes program instructions to generate a game.” (Doc. 71-2, p. 1.)

Defendants: “a conventional CPU or microprocessor processor that executes program instructions to generate a game.” (*Id.* at 2.)

Plaintiffs submit that adding “conventional” is unsupported by the intrinsic evidence but fails to cite any authority for the same. (Doc. 74, p. 21.) However, they additionally argue that including “conventional” would prejudice Plaintiffs to the jury in determining the issue of patentable subject matter and be inconsistent with the court’s prior ruling on patent invalidity. (*Id.*; Doc. 61, pp. 18–19.) Plaintiffs further argue that omitting “input/output circuitry” is a mistake as it is “an essential part of a ‘game processor’ as understood by a POSITA.” (*Id.*)

Defendants argue that “conventional” should be included because there is an “absence of any intrinsic evidence specifying the game processor to have specialized structure, or itself constituting an innovation.” (Doc. 72, p. 19.) Additionally, Plaintiffs’ inclusion of “input/output circuitry” is inappropriate because it adds a limitation that is not mentioned in the patent nor prosecution history. (*Id.*)

In applying the principles from *Phillips*, the court finds that including “conventional” and “input/output circuitry” are unsupported by the intrinsic record.

Thus, the court will construe “game processor” as “a CPU or microprocessor that executes program instructions to generate a game.”

7. “Program instructions”

Similar to “game processor,” Defendants submit that “program instructions,” which is included in 13 of the 75 claims, is a MPF term. (Doc. 72, p. 39.) Defendants argue that the claims do not specify any structure for the “program instructions,” and merely replace the term “means” with “program instructions.” (*Id.* at 40.) This “functional claiming” invokes section 112(f) because “simply disclosing software . . . without providing some detail about the means to accomplish the function, is not enough.” (*Id.* at 41 (citation and quotations omitted).) Conversely, Plaintiffs argue that Defendants are simply reprising their “game processor” argument. (Doc. 74, p. 41.) They direct the court to claim 51 and compare “program instructions” to “computer code” arguing that “instruction” and “code” are both defined terms of art. (*Id.* at 41–42.)

Applying *Williamson*, the court finds that Defendants have not overcome the presumption by demonstrating that the claim term fails to “recite sufficiently definite structure” or else recites “function without reciting sufficient structure for performing that function.” *See Williamson*, 792 F. 3d at 1349. Thus, the court will adopt the agreed-upon alternative construction provided by the parties: “conventional commands that can be executed by a computer.”

CONCLUSION

For the reasons stated herein, the court will construe the disputed claims as detailed in this memorandum. An appropriate order shall issue.

s/Jennifer P. Wilson
JENNIFER P. WILSON
United States District Court Judge
Middle District of Pennsylvania

Dated: December 21, 2020